IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please note the addition of claim 20, which is dependent upon claim 2.

Listing of Claims:

Claim 1 (original): A method of selecting agents that are potentially useful for the treatment of Alzheimer's disease, comprising the steps of:

contacting focal adhesion kinase 2 with a test agent;

measuring a biological activity related to focal adhesion kinase 2 function in the presence and absence of said test agent; and

comparing the difference in the measured biological activity in the presence and absence of said test agent,

wherein a difference indicates the test agent is potentially useful for the treatment of Alzheimer's disease.

Claim 2 (original): The method of Claim 1, wherein said biological activity is selected from the group consisting of: the binding of focal adhesion kinase 2, or fragments and homologues thereof, to a protein that interacts with focal adhesion kinase 2, or fragments and homologues thereof; the tyrosine kinase activity of focal adhesion kinase 2; autophosphorylation of tyrosine residue 402 of focal adhesion kinase 2; phosphorylation of tyrosine residue 579 of focal adhesion kinase 2; phosphorylation of tyrosine residue 580 of focal adhesion kinase 2; and phosphorylation of tyrosine residue 881 of focal adhesion kinase 2.

Claim 3 (original): The method of Claim 1 further comprising the step of determining whether the test agent reduces the level of $A\beta_{42}$ produced in a cells or tissues.

Claim 4 (original): The method of Claim 1, wherein said contacting step comprises contacting said test agent with a cell expressing focal adhesion kinase 2.

Claim 5 (original): The method of Claim 4 further comprising the step of determining whether the test agent reduces the level of $A\beta_{42}$ produced in said cell.

Claim 6 (original): A method of treating or delaying the onset of Alzheimer's disease in an individual in need of such treatment, comprising inhibiting focal adhesion kinase 2 in said individual by administering to said individual an inhibitor of focal adhesion kinase 2.

Claim 7 (original): The method of Claim 6, wherein said inhibitor reduces the level of a focal adhesion kinase 2 biological activity.

Claim 8 (original): The method of Claim 7, wherein said inhibitor is an antagonist of focal adhesion kinase 2 kinase activity.

Claim 9 (original): The method of Claim 6, wherein said inhibitor reduces the amount of mRNA transcript encoding focal adhesion kinase 2 or the amount of focal adhesion kinase 2.

Claim 10 (original): The method of Claim 8, wherein said inhibitor is selected from the group consisting of ribozymes, antisense oligonucleotides, siRNAs, and combinations thereof.

Claim 11 (original): A method of reducing $A\beta_{42}$ in an individual in need of such treatment, comprising inhibiting focal adhesion kinase 2 in said individual by administering to the individual an $A\beta_{42}$-reducing effective amount of an inhibitor of focal adhesion kinase 2.

Claim 12 (original): The method of Claim 11, wherein the level of $A\beta_{42}$ in the cerebrospinal fluid and/or plasma of the individual is reduced.

Claim 13 (original): The method of Claim 11, wherein said inhibitor reduces the level of a focal adhesion kinase 2 biological activity.

Claim 14 (original): The method of Claim 13, wherein said inhibitor is an antagonist of focal adhesion kinase 2 kinase activity.

Claim 15 (original): The method of Claim 14, wherein said inhibitor is selected from the group consisting of ribozymes, antisense oligonucleotides, siRNAs, and combinations thereof.

Claim 16 (original): A method of diagnosis or prognosis of Alzheimer's disease in an individual, comprising determining the level or activity of focal adhesion kinase 2 in said individual.

Claim 17 (original): The method of Claim 16, wherein the method is used for monitoring the effect of an Alzheimer's disease treatment regimen, or for monitoring the progression of Alzheimer's disease in the individual.

Claim 18 (original): An isolated protein complex comprising a first protein interacting with a second protein, wherein said first protein is (1) focal adhesion kinase 2; (2) a focal adhesion kinase 2 fragment; (3) a fusion protein comprising (1) or (2); or (4) a focal adhesion kinase 2 homologue having an amino acid sequence at least 75% identical to (1) or (2); and wherein second protein is selected from the group consisting of focal adhesion kinase 2, ATP-binding cassette transporter, sub-family C, member 8, and delta-catenin, and fragments, and homologues thereof, and fusion protein thereof.

Claim 19 (original): A method of selecting agents that are potentially useful for the treatment of Alzheimer's disease, comprising the steps of:

contacting the isolated protein complex of Claim 18 with a test agent;

detecting the protein complex;

comparing the level of the protein complex in the presence or absence of the test agent, wherein a difference indicates the test agent is potentially useful for the treatment of Alzheimer's disease.

Claim 20 (new): The method of Claim 2, wherein said protein that interacts with focal adhesion kinase 2 is selected from focal adhesion kinase 2, ATP-binding cassette transporter, sub-family C, member 8, and delta-catenin.